

## **Memphis Depot**

### FOCUS ON THE FUTURE

**Environmental Restoration Program Milestones and Update** 

**Presented by** 

John De Back
DoD Base Transition Coordinator

Memphis Depot Restoration Advisory Board Meeting
March 18, 2004

### **Presentation Overview**



### **Progress Report**

- Main Installation
  - Enhanced Bioremediation Study, Remedial Design, FOST #3
- Dunn Field
  - Record of Decision (ROD), Groundwater Treatability Study, Pre-Design Investigation

#### Focus on the Future

- Evolution of Depot Cleanup Team
  - MACTEC/AFCEE, Program Oversight
- Next Steps
  - 2004 and beyond

## Main Installation Update



### **Enhanced Bioremediation Pilot Study**

- Enhanced Bioremediation Treatment (EBT) is the preferred cleanup remedy for groundwater at the MI
  - Naturally occurring organisms help to break down, or degrade, chemicals
  - Providing additional sources of nutrients speeds up or enhances this process
- Pilot Study completed at two MI sites
  - Natural compounds injected into groundwater (vegetable oil, sodium lactate)
  - Results show enhanced bioremediation with sodium lactate is an effective remedy for groundwater at MI

## Main Installation Update



### Remedial Design Report, MI

- Part of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
  - Remedial Design (RD) is the fifth of six stages
- Provides a detailed plan for the design and implementation of cleanup remedies
  - Results of EBT pilot study will be used to design full-scale program for groundwater at the MI
- Selected remedy for soil has been completed
  - Excavation, transport and off-site disposal of an estimated 7,200 square-foot area of soil
- Anticipated completion date: Spring 2004

## Main Installation Update



#### Finding of Suitability to Transfer (FOST) #3

- Requirement of the Base Realignment and Closure Act (BRAC)
- Details historic uses of the property and buildings proposed for transfer
  - Highlights any environmental issues and completed cleanup remedies used to address them
- FOST #3 recommends transfer
  - 65 buildings, 249.21 acres of open land (Memphis Depot Business Park)
  - 37.45 acres of recreational property on the former Main Installation (former Depot golf course)
- Public Comment Period: Spring 2004



### Record of Decision (ROD)

- Part of the CERCLA process
  - Ensures site is safe for current and future use
- Documents the cleanup alternatives selected for soil and groundwater at Dunn Field
  - Excavation and offsite disposal of affected soil and debris from disposal sites
  - Soil Vapor Extraction (SVE) of soil containing solvents
  - Zero-Valent Iron (ZVI) injection, Permeable Reactive Barrier (PRB), and Monitored Natural Attenuation with Institutional Controls for groundwater
  - Institutional Controls for surface soil on west side of Dunn Field
- Includes responses to public comments on the Dunn Field Proposed Plan



- ROD for Dunn Field now under review by:
  - U.S. Department of the Army
  - U.S. Environmental Protection Agency (EPA)
  - Tennessee Department of Environment and Conservation (TDEC)
- Copies of final document will be placed in Information Repositories for public reference
- Scheduled for completion: Spring 2004





### **Groundwater Treatability Study**

Tests conducted to determine effectiveness of preferred cleanup remedies for groundwater:

#### **Zero Valent Iron (ZVI) Injection:**

Iron particles used to reduce levels of Volatile Organic Compounds (VOCs) in shallow aquifer

#### **Permeable Reactive Barrier (PRB):**

Underground wall or barrier with iron as a catalyst used to break VOCs in the groundwater into safe, natural compounds

Results will be used in the Remedial Design



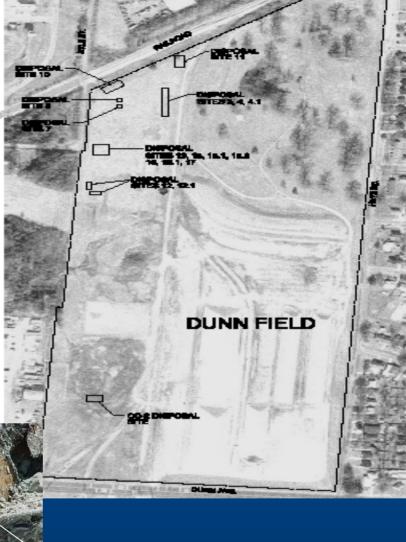
# Pre-Design Investigation of Disposal Sites

### Completed Fall/Winter 2003-04:

- Confirmed locations, contents and condition of buried waste at 17 suspected disposal sites
- Results will be used in the Remedial Design

**Locations of Disposal Sites on Dunn Field** 





Investigation of Disposal Sites

### FOCUS ON THE FUTURE



- Our Goal: Restore the Depot property and ensure it is safe for community reuse
- Nearing completion of key decision-making stages of CERCLA process

#### **Main Installation**

- ROD completed
- Soil remedy completed
- Pilot study for groundwater remedy completed

#### **Dunn Field**

- ROD Spring 2004
- Soil investigation completed
- Pilot studies for groundwater remedies Summer 2004





### **Evolution of the Depot Cleanup Team**

- Air Force Center for Environmental Excellence (AFCEE)
  - New service agent for cleanup program, manages the construction and operation of selected cleanup remedies for the Defense Logistics Agency (DLA)
- MACTEC Engineering and Consulting
  - Remedial Action contractor
  - Will maintain groundwater pump and treat system, prepare Remedial Action work plans, implement cleanup remedies and long-term monitoring at MI and Dunn Field





#### **Base Transition Coordinator**

 After more than 10 years with the program, John De Back is leaving Memphis to join the Pentagon

## <u>Mike Dobbs – Environmental Manager, Defense Distribution</u> <u>Center (DDC)</u>

- Will serve as BRAC Environmental Coordinator and Facility Co-Chair of RAB
- Committed to maintaining an ongoing dialogue with the community throughout the cleanup process

#### **MACTEC**

 Will provide program management assistance throughout Remedial Design/Remedial Action phases





### **Community Contacts**

Please contact us if you have any questions or comments about the environmental cleanup program or the former Memphis Depot:

- COMMUNITY INFORMATION LINE
  - (901) 544-0613
- ENVIRONMENTAL PROGRAM OVERSIGHT/TECHNICAL SUPPORT
  - Mike Dobbs, DDC
  - PHONE: (717) 770-6950
  - EMAIL: michael.dobbs@dla.mil
- MEDIA INQUIRIES/PUBLIC AFFAIRS
  - Jackie Noble, Command Affairs Officer, DDC
  - PHONE: (717) 770-6223
  - EMAIL: jackie.noble@dla.mil

### FOCUS ON THE FUTURE

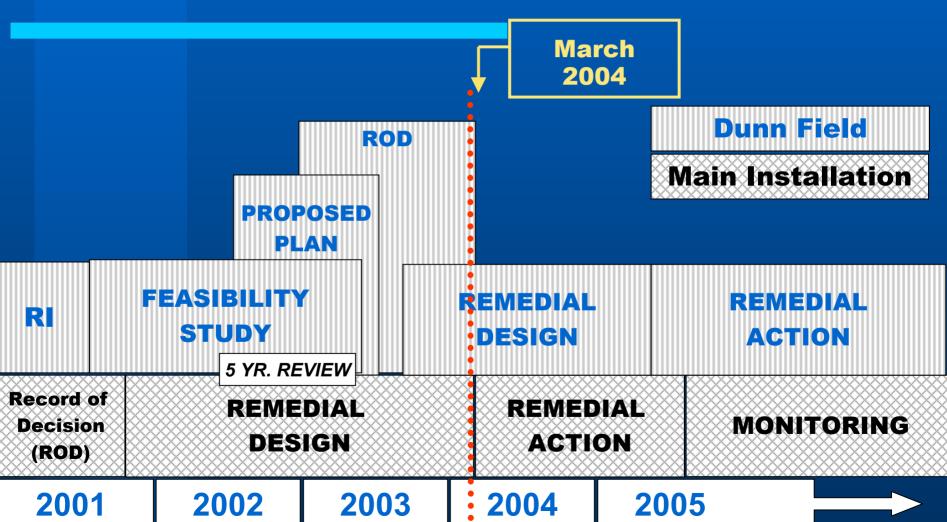


### **Community Contacts**

- BRAC CLEANUP TEAM (BCT)
  - Includes representatives from EPA and TDEC
  - Oversees the cleanup program to ensure it meets appropriate legislative requirements and is protective of human health and the environment
- Turpin Ballard (EPA)
  - (404) 562-8553
  - ballard.turpin@epa.gov
- Jim Morrison (TDEC)
  - (901) 368-7958
  - jmorrison2@state.tn.us

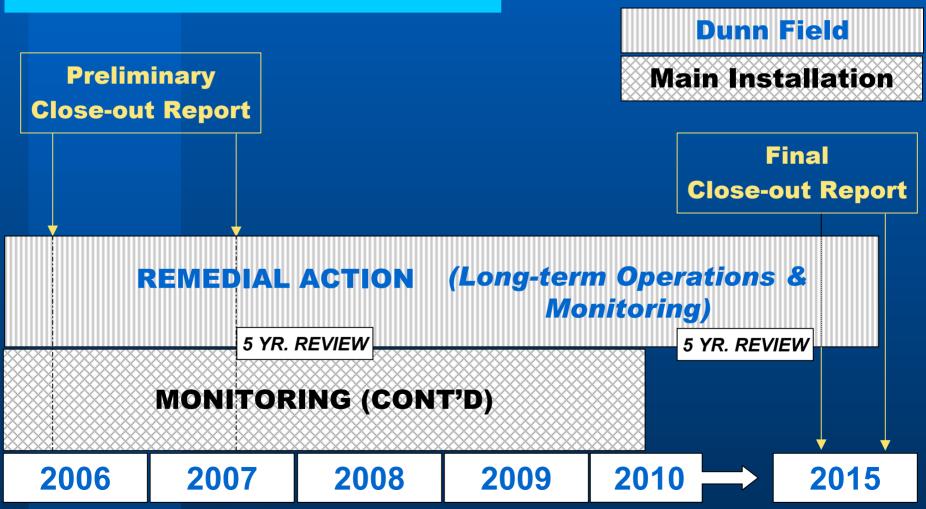
### **CERCLA Update: Where are we now?**





# CERCLA Update: Where are we going?





Projected dates are based on current information and may be subject to change





### **Next Steps**

### **Main Installation**

#### **Fall 2004**

Complete Remedial Action Work Plan Begin Remedial Action

#### 2005 and Beyond

Remedial Action implementation (2 years) and Long-term Monitoring



### FOCUS ON THE FUTURE

### **Next Steps**

### **Dunn Field**

Winter 2004-05

**Complete Remedial Design** 

**Spring 2005** 

FOST #4 - Public Comment Period

Summer 2005

Complete Remedial Action Work Plan Begin Remedial Action

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